# Blueprint and Blueprint-Affiliated Informatics Activities

## Blueprint Informatics

### Blueprint Informatics Team (BIT)

The **BIT** has three overall objectives: 1) to accelerate the use of computational approaches in the neurosciences by advancing informatics research, 2) to increase the value of informatics research by encouraging communication, collaboration, and coordination among the Blueprint Institutes and Centers, and 3) to provide a collective neuroscience voice and unified leadership for informatics activities across NIH and within the wider neuroscience research community. The BIT functions as a common platform for hosting discussions about the overarching area of informatics and serves as an integrating force across all informatics initiatives, whether they are Blueprint, Blueprint-affiliated, or otherwise.

### Contact:

**Michael F. Huerta, Ph.D.**
Associate Director
National Institute of Mental Health (NIMH)
Mhuert1@mail.nih.gov
(301) 443-1815

### Neuroscience Information Framework (NIF)

The Blueprint launched the **NIF** in FY2005 to build an Internet-based repository of neuroscience-related material for the research community. The NIF combines resources of the Blueprint ICs and the Society for Neuroscience (SFN) to provide access to information about neuroscience resources for researchers, including website content, reports of national and international research activities, reagents, biological materials, and databases-all searchable by content and usage. NIF invites registered users to catalog their electronic and non-electronic neuroscience research resources at www.neurogateway.org

### Contacts:

**Karen Skinner, Ph.D.**
Deputy Director for Science and Technology Development
Division of Basic Neuroscience and Behavior Research
National Institute on Drug Abuse (NIDA)
ks79x@nih.gov
(301) 435-0886

**David Shurtleff, Ph.D.**
Director, Division of Basic Neuroscience and Behavioral Research
National Institute on Drug Abuse (NIDA)
dshurtle@mail.nih.gov
(301) 443-1887

U.S. Department of Health and Human Services
National Institutes of Health

*continued*

# Blueprint and Blueprint-Affiliated Informatics Activities *(continued)*

## Blueprint-Affiliated Informatics

### Biomedical Informatics Research Network (BIRN)

The goal of the **BIRN** is to develop an infrastructure that allows researchers to share data, both for limited collaborations inside a defined research group and also among the research community at large. Most of the basic BIRN infrastructure has been developed at the University of California, San Diego under a Coordinating Center award. Three large testbed projects, all of which involve neuroinformatics research, have been funded to insure that the data-sharing infrastructure is responsive to the needs of biomedical investigators. These projects are focused on structural MRI imaging, functional MRI imaging, and new techniques for merging and blending imaging technologies and image resolutions. The tools developed with support from this project are freely available to the biomedical community via the BIRN website at www.nbirn.net

### Contact:

**Greg Farber, Ph.D**
Senior Health Scientist Administrator
National Center for Research Resources (NCRR)
farberg@mail.nih.gov
(301) 435-0778

### Blueprint Informatics Funding Opportunity Announcements (FOAs)

Developed under BIT to take advantage of the BIRN infrastructure already in place, two Blueprint-affiliated FOAs have recently been announced.

**Tool and Data Sharing (PAR-07-426 grants.nih.gov/grants/guide/pa-files/PAR-07-426.html)** asks researchers to apply for funds to bring either their data analysis tools or their data into the BIRN infrastructure for use by the research community. The BIRN infrastructure is unique in that it allows multiple data analysis tools to be compared against each other in a common environment using real data. The infrastructure also provides a convenient way for researchers to store and share their data.

**Data Ontologies (PAR-07-425 grants.nih.gov/grants/guide/pa-files/PAR-07-425.html)** tackles a deeper problem of research data sharing – how to match the meanings of words when their usage varies among data sets. This grant will support research to create an ontology using controlled vocabularies for two datasets in a specific research area. Once the ontology is created, it will be shared within the field. Contacts from individual Institutes and Centers are listed in each FOA.

U.S. Department of Health and Human Services
National Institutes of Health

NIH Blueprint and Blueprint-affiliated Informatics activities are funded by the National Institutes of Health (NIH) and the Institutes and Centers that comprise the NIH Blueprint for Neuroscience Research.

October 2007